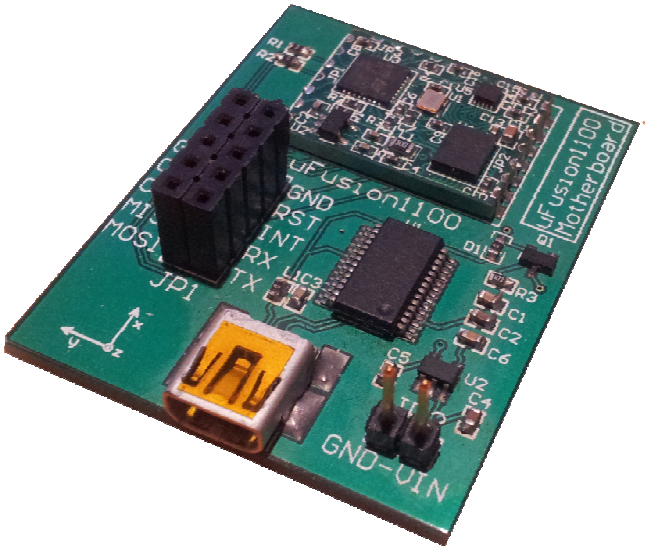
µFusion Motherboard

User Manual

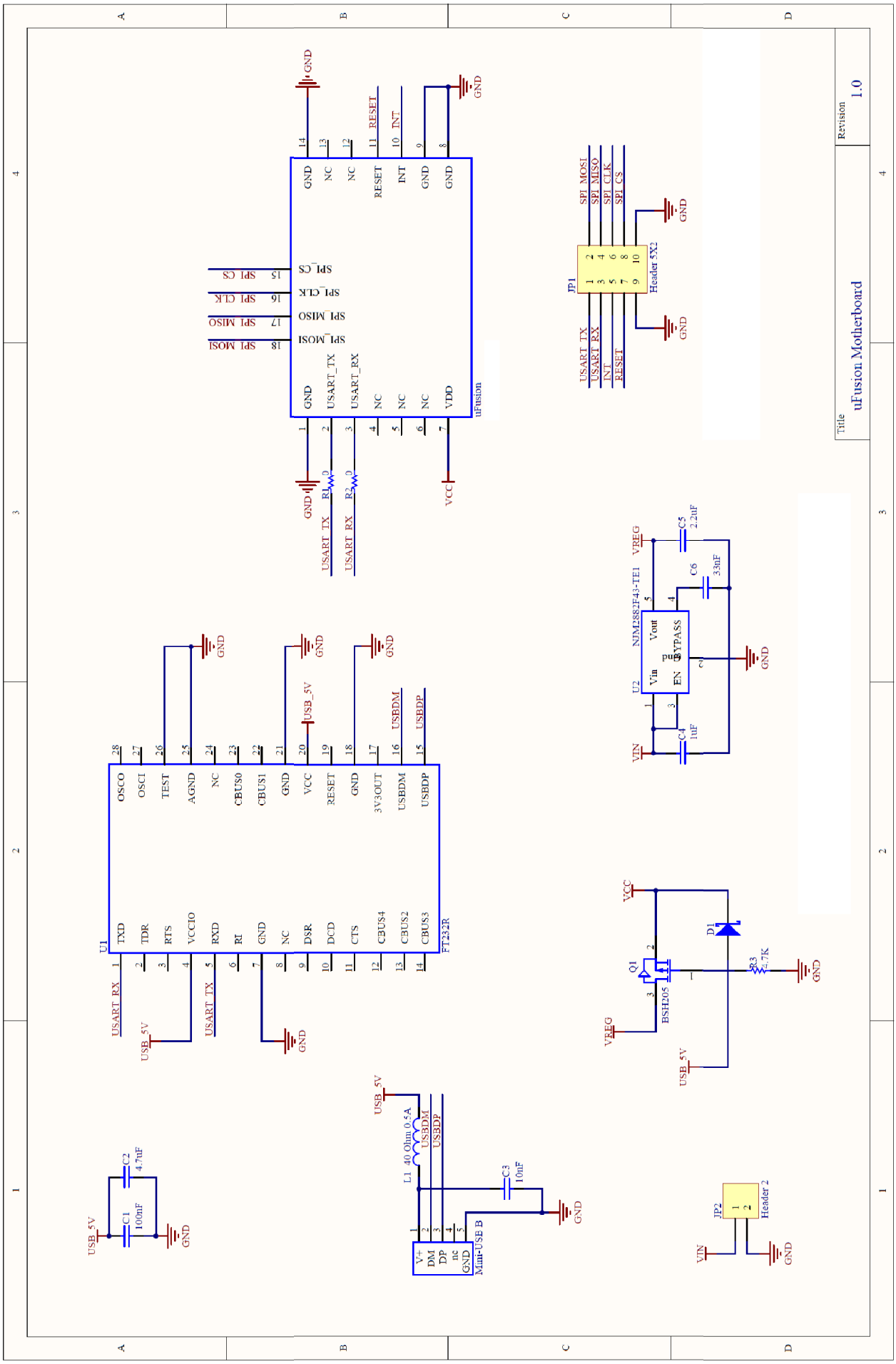


Rev. 0.1 - Feb. 2013

Introduction

µFusion Motherboard is a ready to use AHRS module that offers all the µFusion functionality plus the USB connection. When connected to a PC it can be used with their GUI.

µFusion is an easy configurable 9DoF AHRS system that mix data coming from 3 axes accelerometer, 3 axes gyroscope, 3 axes magnetometer to extract Attitude and Heading References. Thanks to its shape, weight and small dimensions, it can easily embedded on every kind of PCB.
µFusion offers a range of communication interface options that include UART, SPI with which is possible to have access to several I/O registers for configuration and data output.


Title
µFusion Motherboard
Revision
1.0
µFusion
GND
NC
RESET
INT
VDD
USART_TX
USART_RX
SPI_CS
SPI_CLK
SPI_MISO
SPI_MOSI
R1 0
R3 0
JP1
Header 5X2
SPI_MOSI
SPI_MISO
SPI_CLK
SPI_CS
USART_TX
USART_RX
INT
RESET
U1
FT232R
OSCO
OSCI
TEST
AGND
CBUS0
CBUS1
VCC
3V3OUT
USBDM
USBDP
TXD
TDR
RTS
VCCIO
RXD
RI
DSR
DCD
CTS
CBUS4
CBUS2
CBUS3
U2
NJM2882F43-TE1
Vout
Vin
EN
BYPASS
C4 1uF
C5 2.2uF
C6 33nF
VIN
VREG
USB_5V
L1 40 Ohm 0.5A
C1 100nF
C2 4.7uF
C3 10nF
Mini-USB B
V+
DM
DP
nc
Q1
BSH205
D1
R3 4.7K
JP2
Header 2